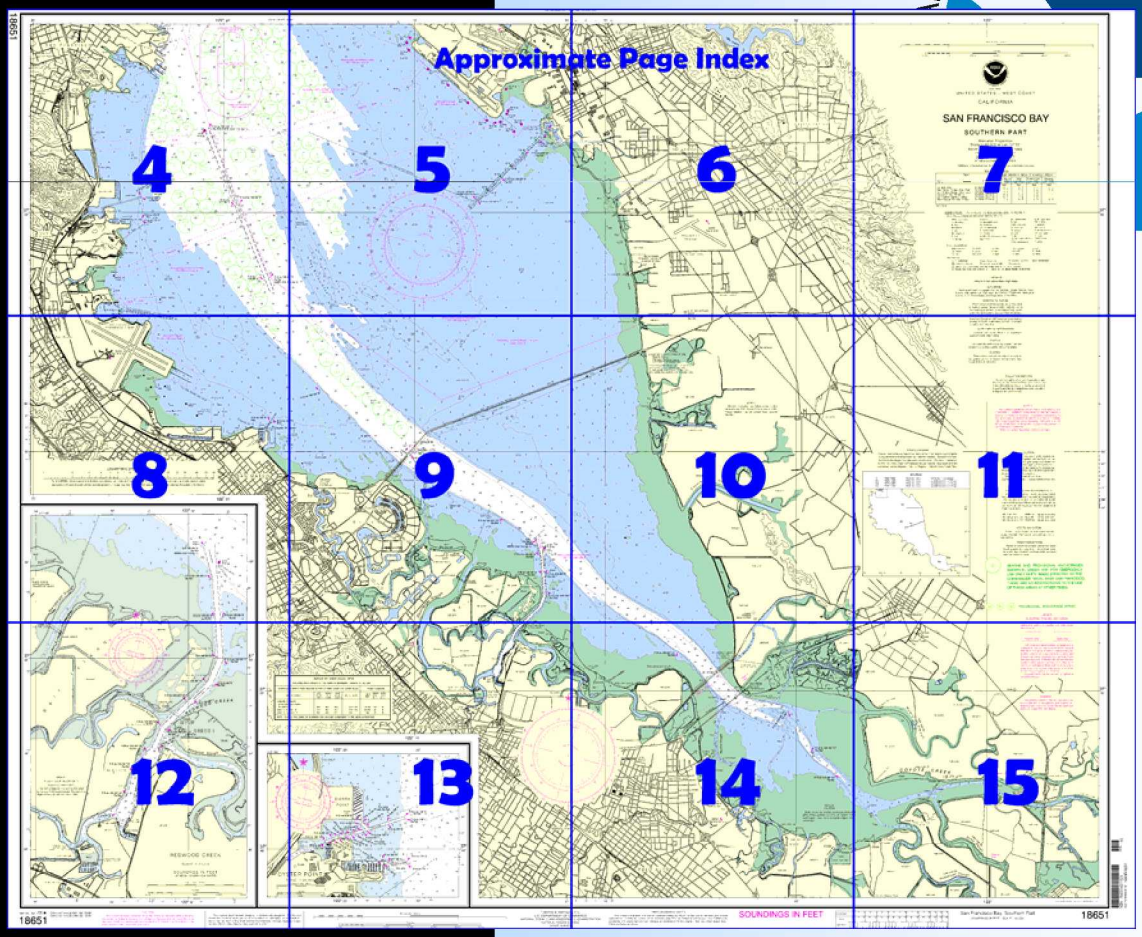
BookletChart™

San Francisco Bay – Southern Part

(NOAA Chart 18651)

A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*



NOAA OCEANIC AND ATMOSPHERIC ADMINISTRATION OF COMMERCE

Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

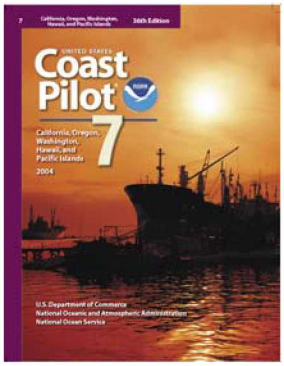
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 7 excerpts]

(356) S of San Francisco, **Point Avisadero,** which is the E extremity of Hunters Point, **Sierra Point,** Oyster Point, **Point San Bruno,** and Coyote Point, all on the W shore of the bay, are prominent natural features. A **naval restricted area** is offshore of Hunters Point. In January 1986, a sunken wreck was reported about 1 mile SE of Point Avisadero in about 37°42'59"N., 122°20'30"W. The Bayshore Freeway extends S on a filled area from the vicinity of **Candlestick Point,** and cuts back inland at Sierra Point. Sierra Point is the site of a small-boat harbor which can accommodate about 500 boats. **Oyster Point Channel,** marked by private lights, has depths of about 5 feet, except for a 2-foot shoal in about 37°40'09.5"N., 122°22'47.5"W., and leads to a small basin. A spur channel, marked by private lights, branches off the N side of Oyster Point Channel and leads to the entrance to the small-boat harbor at Sierra Point. The basin at the end of Oyster Point Channel has two private wharves in ruins and sheds on the W side; a marina that can accommodate about 200 boats is on the S side.

(357) **Oyster Point,** a low filled area, is the site of a small-boat harbor accommodating about 570 boats. Depths of about 6 feet are in the harbor. The entrance channels E and NE of the harbor are marked by private lights. In 1981, the E entrance channel had a controlling depth of 6 feet. Transients should report to the harbormaster's office for berth assignment. A prominent sculptured tower is on the hill 0.7 mile S of Oyster Point; the tower is floodlighted.

(358) The area between Point San Bruno and Coyote Point is occupied by **San Francisco International Airport.**

(359) **Coyote Point** is covered by a heavy growth of trees and is raised as an island. It is the most prominent point on the S bay. A small-craft harbor accommodating about 580 boats is on the E side of the point. The entrance channel, marked by a private lighted range and two private lights, had a reported controlling depth of depth of 10 feet in 2002. The front range light is usually difficult to see because of obstructing boats and masts. The harbor, operated by San Mateo County, is composed of two basins having depths of about 8 feet. Transients should report to the harbormaster's office on the NW side of the harbor for berth assignment; guest berths are usually available. A harbor patrol boat is maintained.

(361) The **San Mateo-Hayward Bridge** crossing the lower part of San Francisco Bay near **San Mateo** has a fixed span with a clearance of 135 feet over the main channel. The bridge is marked at mid span by racon. An overhead power cable with a clearance of 160 feet over the main channel crosses the bay just S of the bridge.

(362) A section of the old San Mateo lift bridge, now used as a fishing pier, extends 4,135 feet from the San Mateo shore just S of the new bridge. A part of the fishing pier extends into the W part of the main channel. A private light, 12 feet above the water, marks the NE leg of a transmission line tower close E of the seaward end of the fishing pier.

(363) In June 1983, a 34-foot shoal was reported to extend from under to just SE of the bridge in about 37°35'N., 122°15'W.

(364) **Redwood Creek,** 4 miles SE of San Mateo Bridge, is entered through a marked channel that leads to the municipal wharves at the **Port of Redwood City,** 2.5 miles above the mouth. Turning basins are to the N and S of the wharves. Federal project depths are 30 feet in the channel and basins. (See Notice to Mariners and latest editions of charts for controlling depths.)

(365) Overhead power cables across the waterway have a clearance of 155 feet. Prominent silos of a cement plant are at the junction with **Westpoint Slough,** just N of the port.

(371) **Redwood City** is 2 miles S of the port facilities. Redwood City Municipal Marina, just S of the port, can accommodate about 225 small craft. Other small-craft facilities are SW of the Municipal Marina.

(372) **Ravenswood Point** and **Dumbarton Point** are at the head of the bay and the mouth of Coyote Creek. Two bridges and an aqueduct cross the bay at this point. The **Dumbarton Highway Bridge,** the NW bridge, has a fixed span with a clearance of 85 feet. About 1,100 yards SE of the Dumbarton bridge, an aqueduct, used to supply the city of San Francisco with water, crosses the bay. On the W shore, the aqueduct is carried on a trestle to a concrete building (charted) where it tunnels the channel to the E shore. The **Dumbarton Railroad Bridge,** just S, has a swing span with a clearance of 13 feet. The bridge is maintained in the open position.

(373) **Coyote Creek** has many tributary sloughs. The main channel is marked as far as **Calaveras Point,** about 4 miles above the railroad bridge at Dumbarton Point. The power cables, 1.3 miles above Calaveras Point, have a clearance of 65 feet.

(374) A channel, marked by a daybeacon and buoys, leads for about 3 miles through **Guadalupe Slough.** In July 1985, a submerged obstruction with 3 feet over it was about 150 yards NNW of Daybeacon 20; caution is advised when transiting the area. An overhead power cable with a clearance of 65 feet crosses the slough about 1 mile above the entrance.

Table of Selected Chart Notes

Corrected through NM Apr. 29/06
Corrected through LNM Apr. 18/06

HEIGHTS
Heights in feet above Mean High Water.

PLANE COORDINATE GRID
(based on NAD 1927)

California State Grid zone III is indicated by ticks at 5,000 foot intervals. The last three digits of the grid numbers are omitted.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.241" southward and 3.881" westward to agree with this chart.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOTE B
CAUTION
Mariners are warned that numerous uncharted piles, snags, pumps, siphons, and pipes, some submerged, may exist along the edges of the waterways.

NOTE C
Borrow dredging has taken place in this general area. Depths are from survey of 1980. Actual depths may be greater than charted depths.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA	KHB-49	162.40 MHz WX2
Mt. Umunhum, CA	KEC-49	162.55 MHz WX1
Mt. Umunhum, CA	WWF-64	162.45 MHz WX5

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

Refer to charted regulation section numbers.

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS
(For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

REDWOOD CITY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2010

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
CHANNEL ENTRANCE (37°33'10"N., 122°11'43"W.) TO LIGHT 8	29.0	29.0	28.0	7-10	700-300	1.07	30
LIGHT 8 TO LIGHT 14	27.0	28.0	27.0	7-10	300-350	.90	30
LIGHT 14 TO LIGHT 15	28.0	29.0	28.0	7-10	300	.28	30

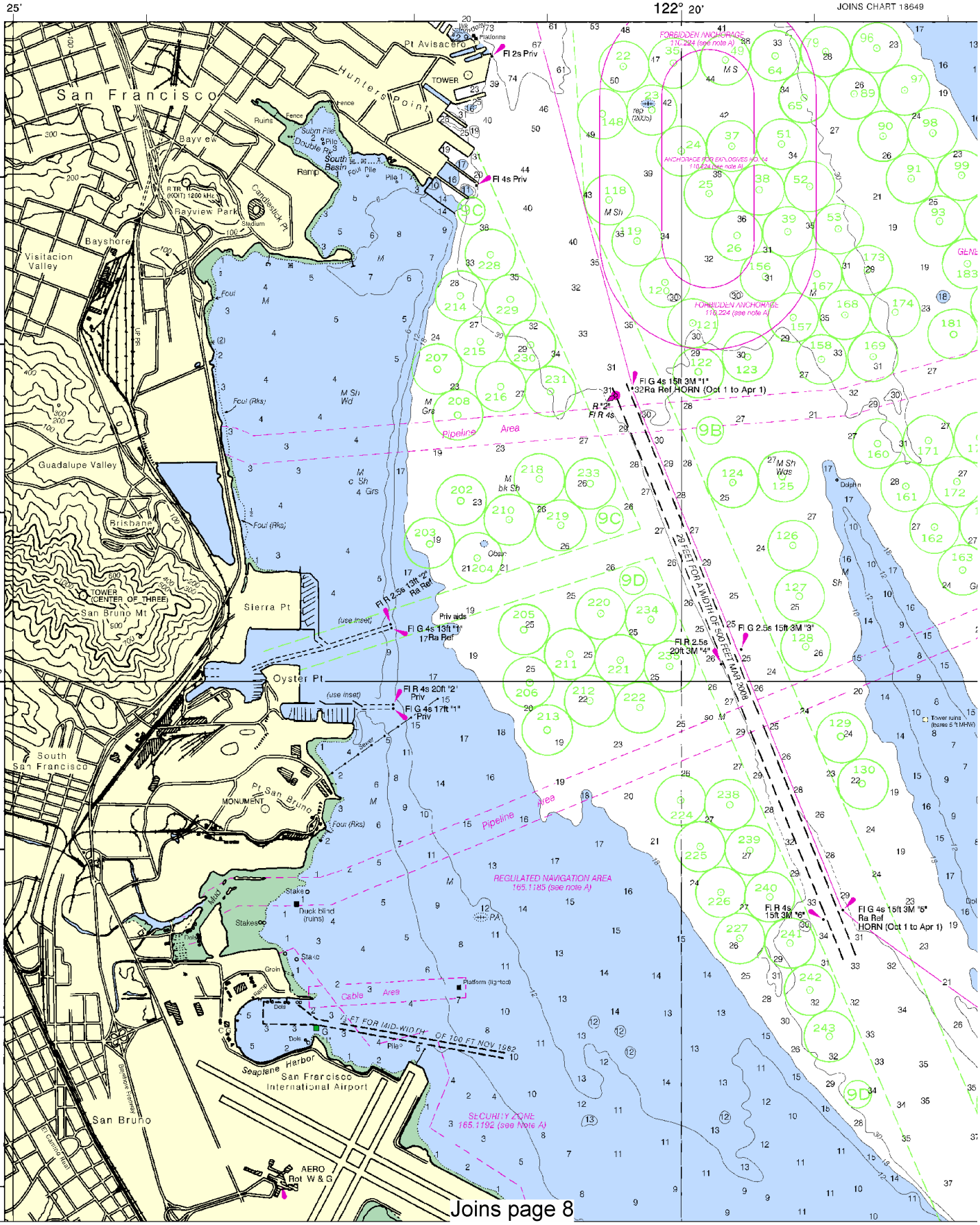
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

PRINT-ON-DEMAND CHARTS
This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Lower Low Water	Extreme Low Water
		feet	feet	feet	feet
Hunters Point	(37°44'N/122°21'W)	6.7	6.1	1.1	-2.5
San Mateo Bridge (East End)	(37°36'N/122°11'W)	7.7	7.1	1.2	-2.5
San Mateo Bridge (West End)	(37°35'N/122°15'W)	7.7	7.1	1.2	--.--
Redwood City (Wharf 5)	(37°30'N/122°13'W)	8.2	7.6	1.2	--.--
Dumbarton Highway Bridge	(37°30'N/122°07'W)	8.5	7.9	1.2	--.--
Mud Slough Railroad Bridge	(37°28'N/121°59'W)	7.5	6.9	0.5	-2.5

(Jan 2006)



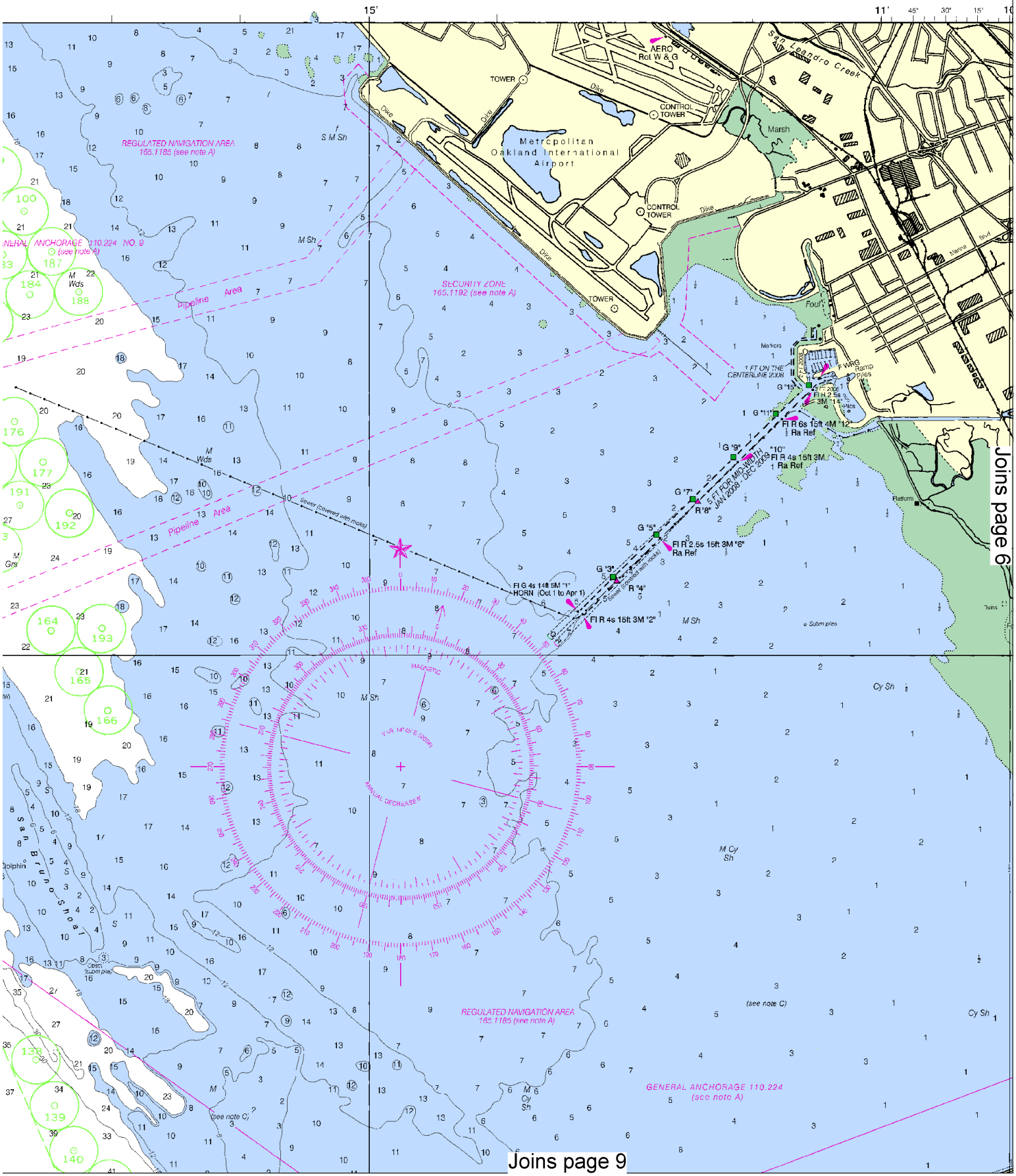
North

Printed at reduced scale. ~~SCALE 1:40,000~~

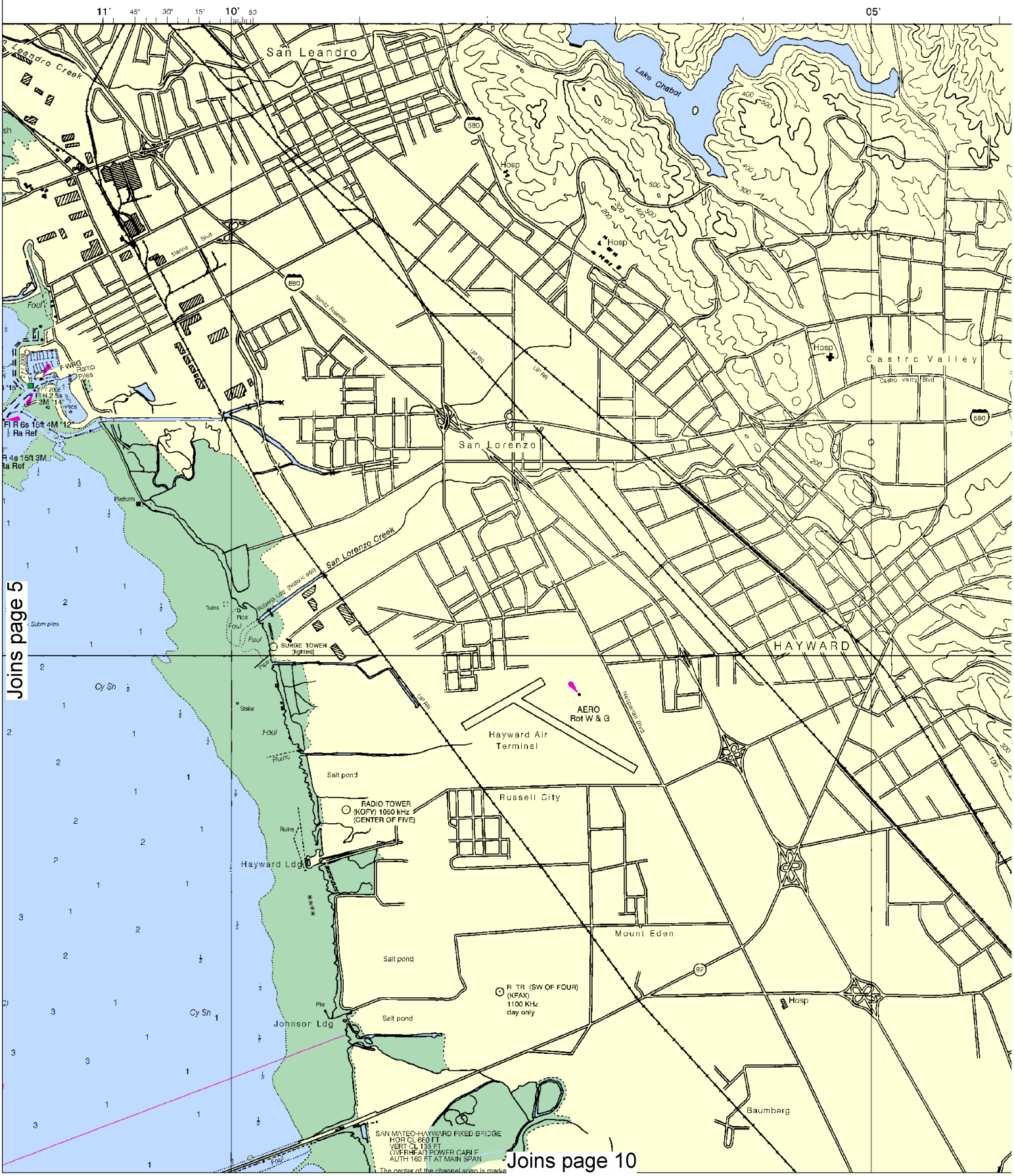
Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



This BookletChart was reduced to 70% of the original chart scale.
The new scale is 1:57143. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

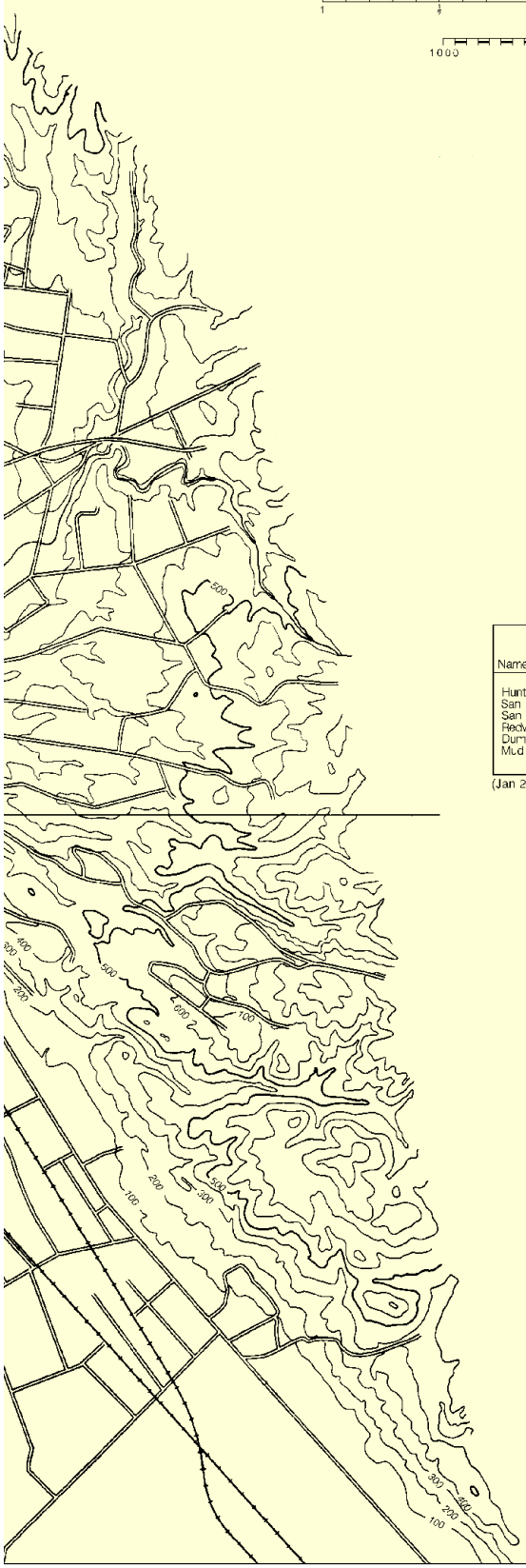
122°

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000



NOAA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

COAST SURVEY

UNITED STATES - WEST COAST

CALIFORNIA

SAN FRANCISCO BAY

SOUTHERN PART

Mercator Projection
Scale 1:40,000 at Lat. 37°35'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Lower Low Water	Extreme Low Water
		feet	feet	feet	feet
Hunters Point:	(37°44'N/122°21'W)	8.7	6.1	1.1	-2.5
San Mateo Bridge (East End)	(37°36'N/122°11'W)	7.7	7.1	1.2	-2.5
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(Jan 2006)

37° 40'

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERC aeronautical
Al alternating
Bl black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT-HO lighthouse
M nautical mile
m minutes
MICHO TR microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref racar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
CD existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.241" southward and 3.881" westward to agree with this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

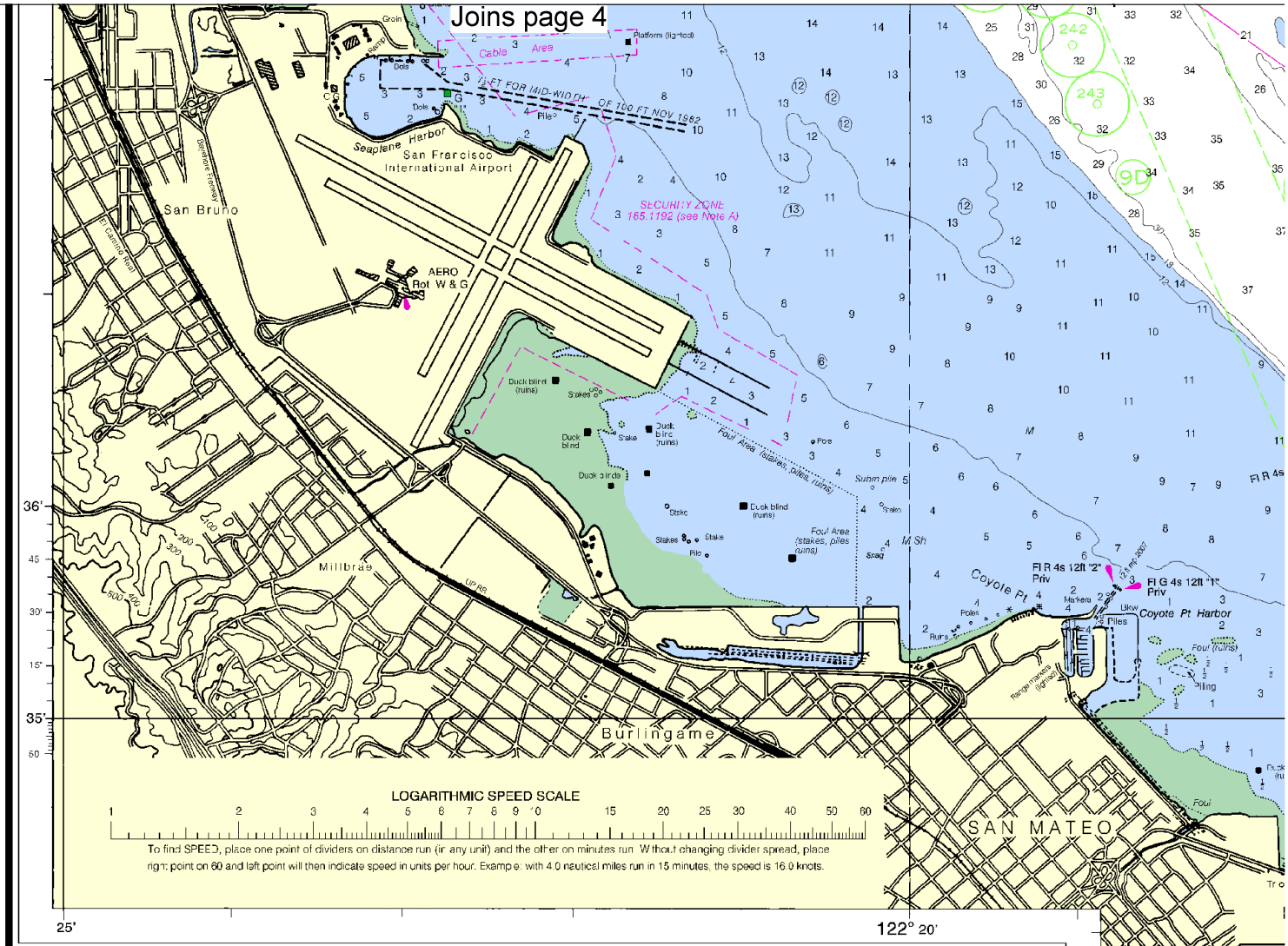
CAUTION

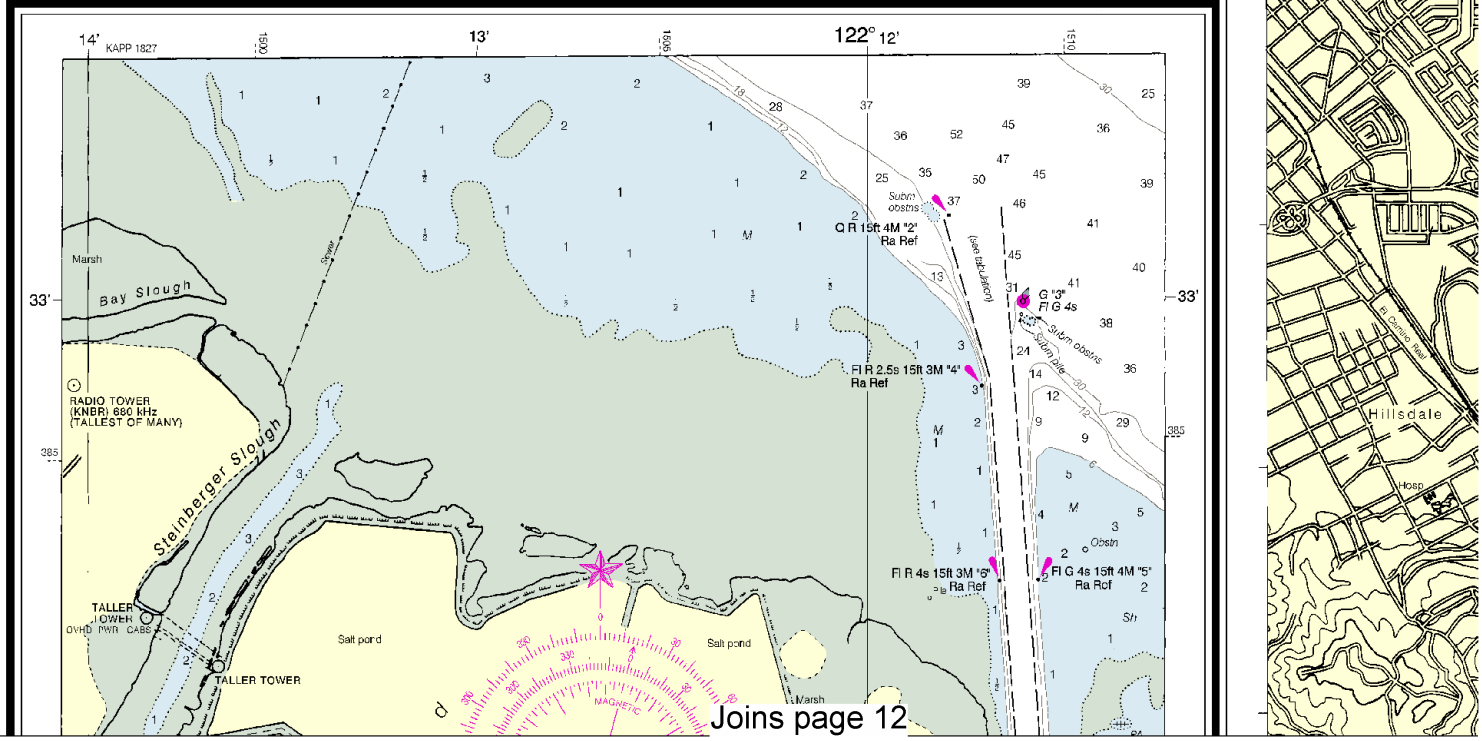
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to

Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 4710 11/23/2010,
NGA Weekly Notice to Mariners: 4910 12/4/2010,
Canadian Coast Guard Notice to Mariners: n/a .

Joins page 4





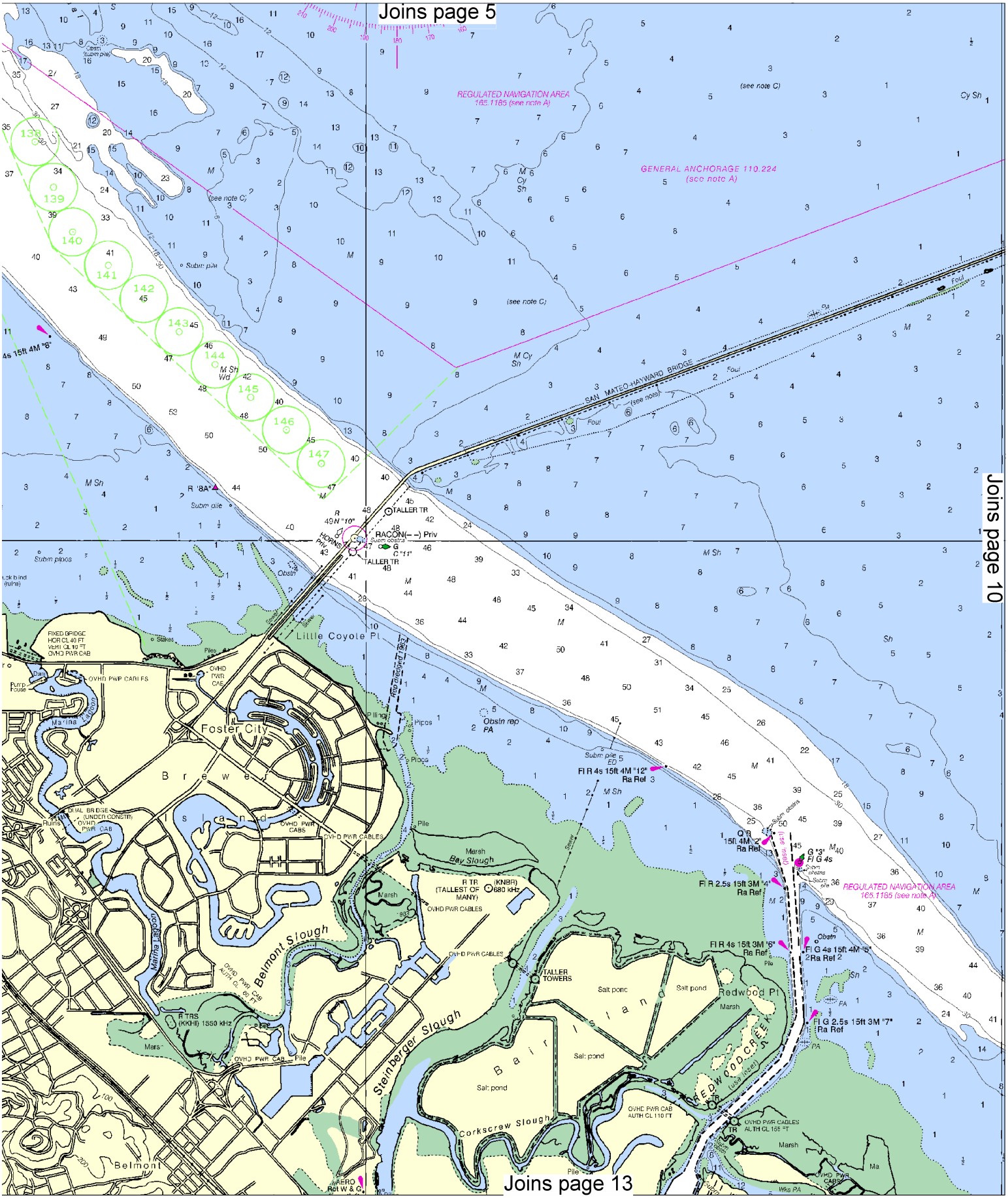
Joins page 12

North

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles 1 ½ 0 1 2 3

Yards 1000 0 1000 2000 3000 4000 5000


Joins page 5
Joins page 10
Joins page 13
REGULATED NAVIGATION AREA
165.1185 (see note A)
GENERAL ANCHORAGE 110.224
(see note A)
SAN MATEO-HAYWARD BRIDGE
(see note)
(see note C)
138
139
140
141
142
143
144
145
146
147
TALLER TR
RACON(– –) Priv
HORNS Priv
Little Coyote Pt
Foster City
Brewer Island
Belmont Slough
Marina Lagoon
Steinberger Slough
Corkscrew Slough
Bair Island
Redwood Pt
REDWOOD CREEK
Salt pond
Marsh
Bay Slough
Belmont
TALLER TOWERS
R TR (KNBR) 680 kHz
(TALLEST OF MANY)
R TRS (KKHI) 1550 kHz
OVHD PWR CABLES
FIXED BRIDGE
HOR CL 40 FT
VERT CL 10 FT
OVHD PWR CAB
DUAL BRIDGE
(UNDER CONSTR)
Fl R 4s 15ft 4M "12"
Ra Ref 3
Fl R 2.5s 15ft 3M "4"
Ra Ref
Fl R 4s 15ft 3M "6"
Ra Ref
Fl G 4s 15ft 4M "5"
Ra Ref 2
Fl G 2.5s 15ft 3M "7"
Ra Ref
Q R
15ft 4M "2"
Ra Ref
G "3"
Fl G 4s
OVHD PWR CAB
AUTH CL 110 FT
OVHD PWR CABLES
AUTH CL 165 FT
AERO
Rct W & G

10

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles

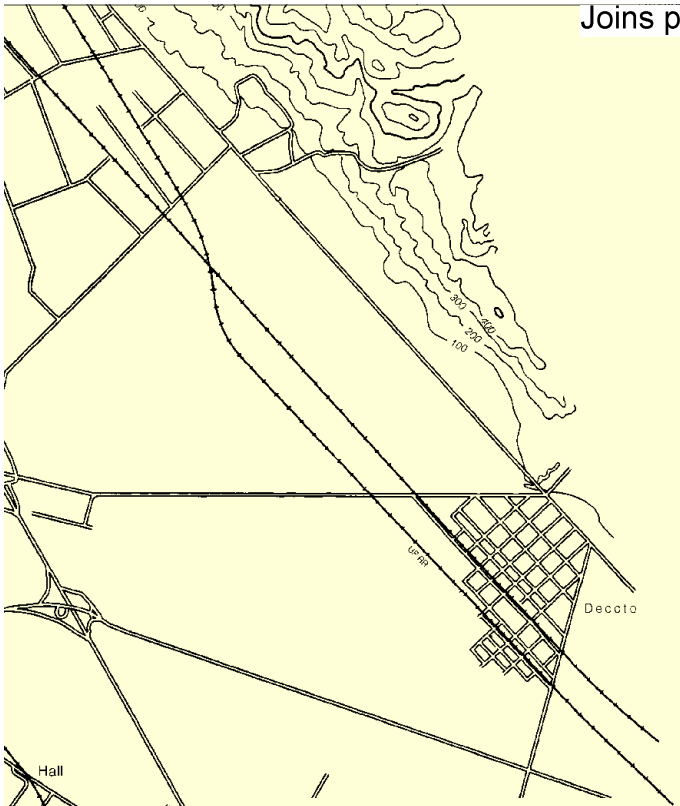
1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 7



lata from the Corps of Engineers, Geological
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POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

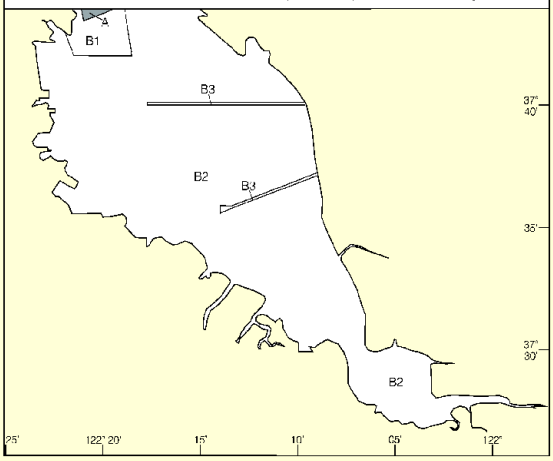
Refer to charted regulation section numbers.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A	1990-1999	NOS Surveys	full bottom coverage
B1	1990-1993	NOS Surveys	partial bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage



CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

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AIDS TO NAVIGATION

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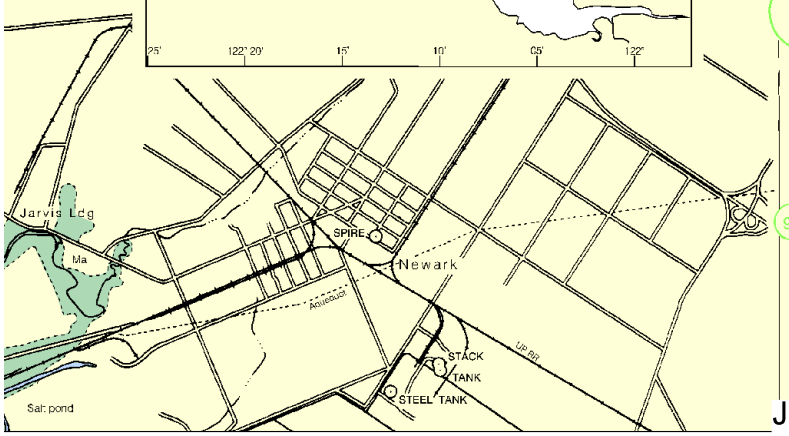
RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.



BERTHS AND PROVISIONAL ANCHORAGES SHOWN IN GREEN ARE FOR EMERGENCY USE ONLY WHEN MADE EFFECTIVE BY THE COMMANDER, NAVAL BASE SAN FRANCISCO. THERE ARE NO RESTRICTIONS TO THE USE OF THESE AREAS AT OTHER TIMES.

9B 9C 9D PROVISIONAL ANCHORAGE AREAS

CAUTION

SUBMARINE PIPELINES AND CABLES

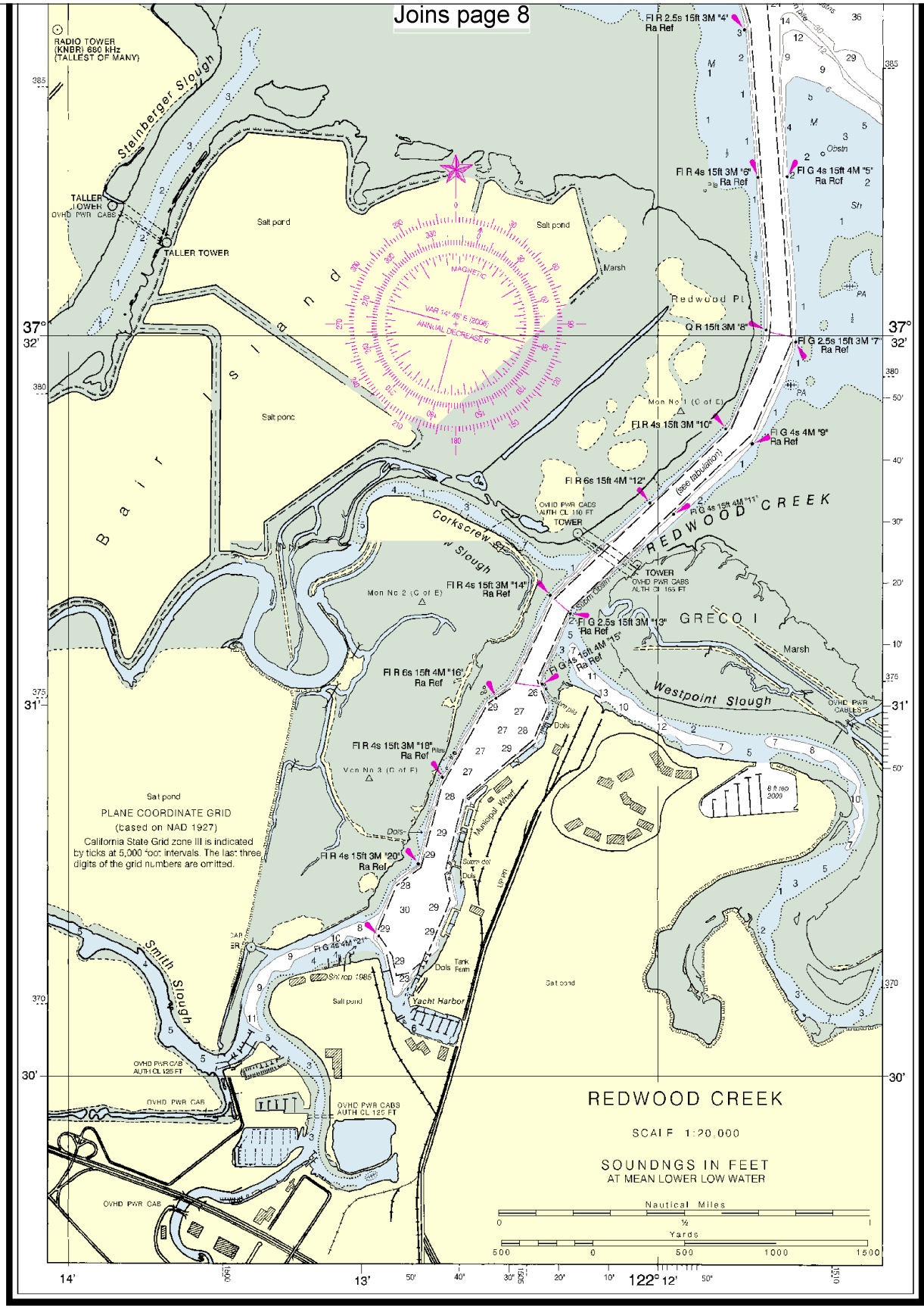
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area Cable Area

Additional uncharted submarine pipelines and

Joins page 15

35'
45"
30'
15"
34'
50"



44th Ed., Apr. /06 ■
Corrected through NM Apr. 29/06
Corrected through LNM Apr. 18/06

18651

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

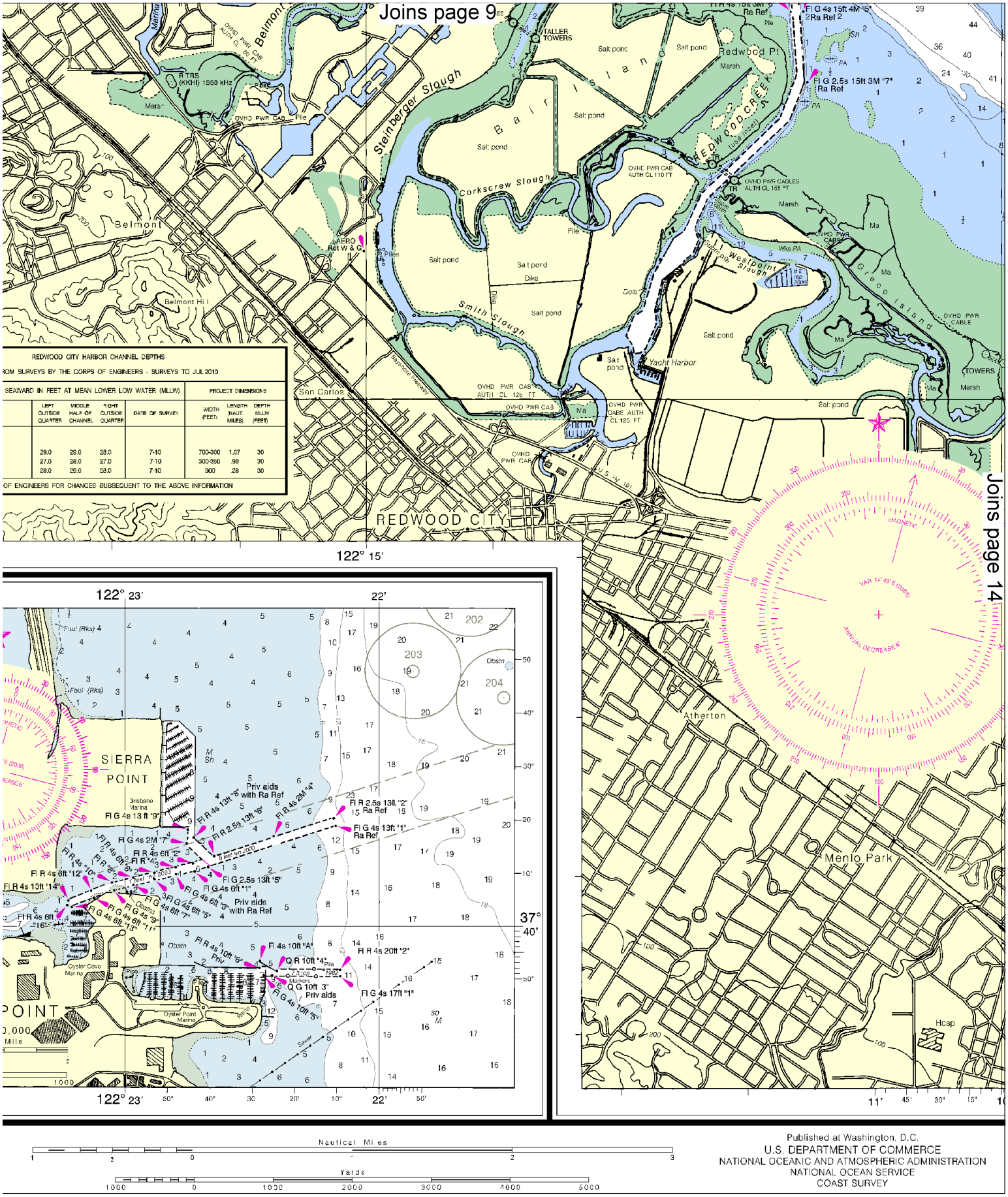
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000

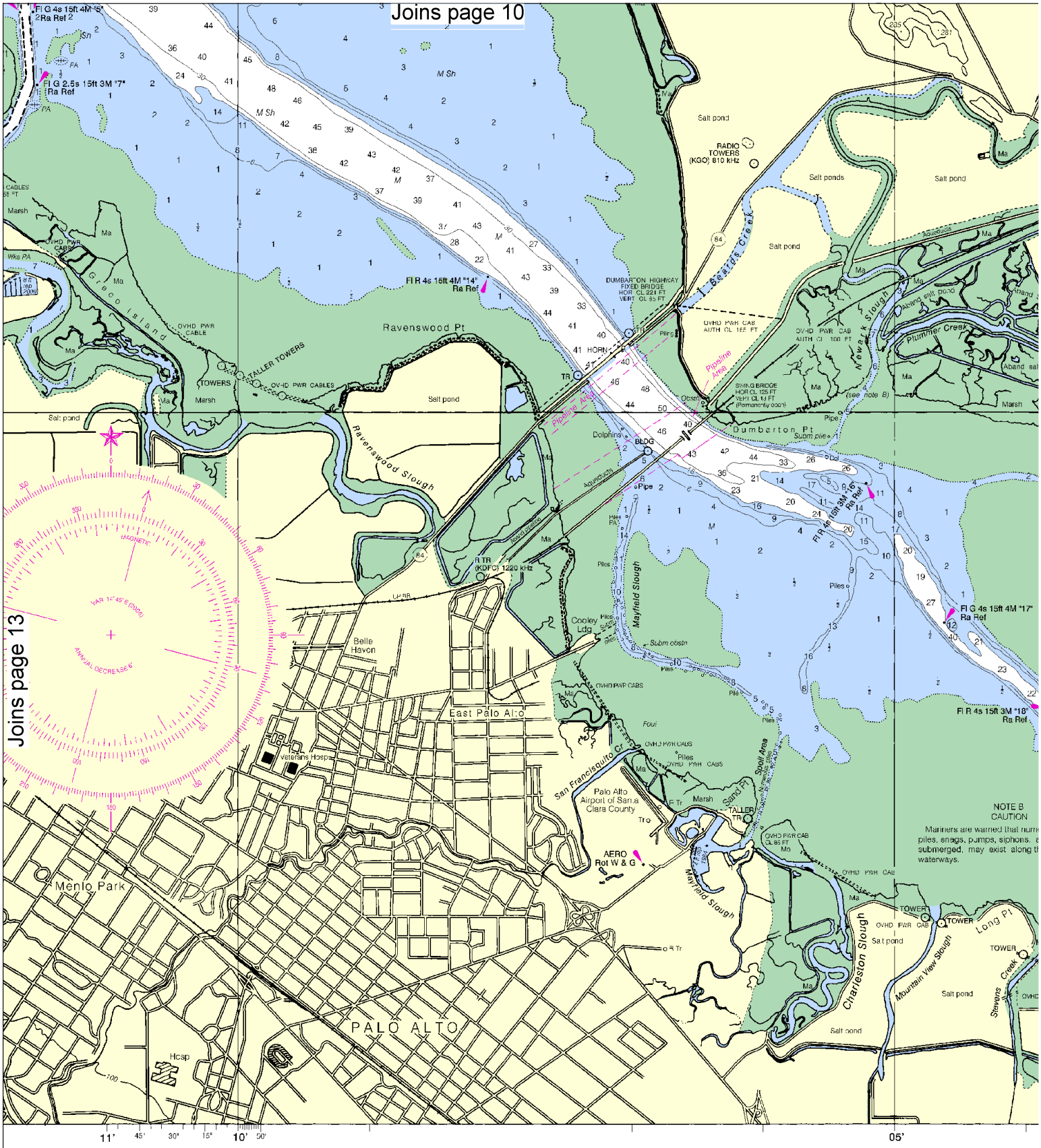
See Note on page 5.



Nautical Miles

Yards

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

SOUNDINGS IN FEET

14

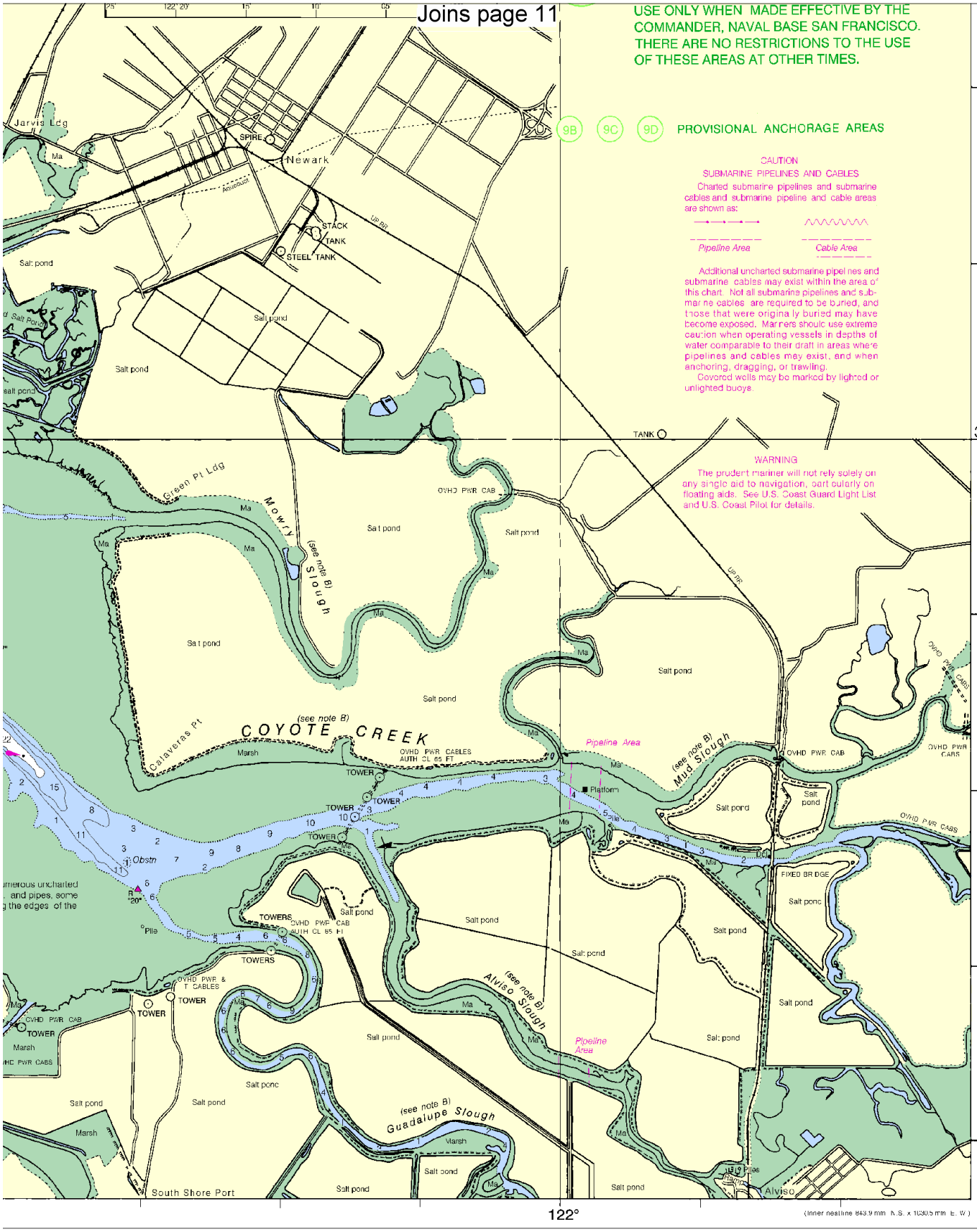
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.



FATHOMS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
FEET 6 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102
METERS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

San Francisco Bay, Southern Part
SOUNDINGS IN FEET - SCALE 1:40,000

18651

EDITION NO. 44
NSN 7642014011524 NGA REFERENCE NO. 18AHA18651

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Search & Rescue – 510-437-3700
Coast Guard San Francisco – 415-399-3479
Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA, The Nation's Chartmaker

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Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs™) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.